

AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double brackets indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) A high-density recording medium including one or more recording layers, the recording medium comprising:

a lead-in area including a control information required for recording or reproducing data on or from the recording medium; and

a burst cutting area located at an inner area other than the lead-in area, the burst cutting area including a plurality of data units;

wherein additional information is included in at least one of the data unit, units, the additional information including at least a medium type information that identifies what kinds of recording layers are included in the recording medium.

2. (Previously Presented) The high-density recording medium according to claim 1, wherein the medium type information indicates that the recording medium is a writable medium or read-only medium.

3. (Currently Amended) The high-density recording medium according to claim 1, wherein each data unit is preceded by ~~synch~~ sync information.

4. (Previously Presented) The high-density recording medium according to claim 3, wherein the additional information is recorded in a first data unit.

5. (Previously Presented) The high-density recording medium according to claim 1, wherein the additional information is repeatedly recorded in each data unit.

6. (Previously Presented) The high-density recording medium according to claim 1, wherein the

control information in said lead-in area includes the additional information in the burst cutting area.

7. (Previously Presented) The high-density recording medium according to claim 6, further comprising:

a lead-out area having the control information.

8. (Previously Presented) The high-density recording medium according to claim 1, wherein the additional information further includes layer information.

9. (Previously Presented) The high-density recording medium according to claim 8, wherein the additional information further includes a sequence number to identify a data unit.

10. (Previously Presented) The high-density recording medium according to claim 8, wherein the layer information represents the number of layers included in the recording medium.

11. (Previously Presented) The high-density recording medium according to claim 10, wherein the control information in said lead-in area includes the additional information in the burst cutting area.

12. (Previously Presented) The high-density recording medium according to claim 9, wherein the additional information further includes an application indicator to indicate a use for a copy protection system.

13. (Previously Presented) The high-density recording medium according to claim 1, wherein the additional information further includes a reflectivity information, the reflectivity information indicating the reflectivity of the recording medium.

14. (Previously Presented) The high-density recording medium according to claim 13, wherein the reflectivity information is required for an optical power control or an automatic gain control when a data recording or reproducing operation is carried out.

15. (Previously Presented) The high-density recording medium according to claim 1, wherein the medium type information represents the type of a BD-ROM (BD-Read Only memory), a BD-R (BD-Recordable), or BD-RE (BD-Rewritable).

16. (Previously Presented) The high-density recording medium according to claim 1, wherein the data unit comprises a plurality of information bytes, the medium type information is included in at least one information byte.

17. (Previously Presented) The high-density recording medium according to claim 16, wherein the medium type information is included in the first information byte in each data unit.

18. (Currently Amended) A method for recording or reproducing data on or from a high-density recording medium, ~~comprising the steps of:~~ medium including one or more recording layers, the method comprising:

identifying information included in at least one data unit of a burst cutting area of the recording medium, the information including at least a medium type information that identifies what kinds of recording layers are included in the recording medium; and

controlling a data recording or reproducing operation, based on the identified information.

19. (Previously Presented) The method according to claim 18, wherein the information further includes layer information to indicate the number of layers included in the recording medium, thereby identifying the number of layers of the recording medium.

20. (Previously Presented) The method according to claim 18, wherein the burst cutting area includes a plurality of data units, the information included in at least one data unit, wherein the identifying step identifies the information by processing the data unit.

21. (Previously Presented) The method according to claim 20, wherein the information is repeatedly included in each data unit.

22. (Previously Presented) The method according to claim 18, wherein the medium type information represents the type of a BD-ROM (BD-Read Only memory), a BD-R (BD-Recordable), or a BD-RE (BD-Rewritable).

23. (Previously Presented) The method according to claim 18, wherein the information includes a reflectivity information of the recording medium, thereby controlling an optical power or an automatic gain for a recording or reproducing operation.

24. (Previously Presented) The method according to claim 18, wherein the identifying step identifies the information preferentially when the recording medium is loaded in a recording or reproducing apparatus.

25. (Previously Presented) The method according to claim 18, wherein the identifying step identifies the information in an early stage of recording or reproducing data on or from the recording medium.

26. (Previously Cancelled)

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34. (Previously Cancelled)

35. (Previously Presented) The method according to claim 18, wherein the information includes a sequence number to identify a data unit, thereby identifying the data unit that includes the information.

36. (Previously Presented) The method according to claim 18, wherein the recording medium further comprises a lead-in area that includes information equal to the information of the burst cutting area followed by the lead-in area, the method further comprising,
moving an optical pickup to read the information recorded on the burst cutting area, and then identifying the information in the burst cutting area.

37. (Previously Presented) The method according to claim 18, wherein the identifying step identifies the information at an early stage of a drive start-up procedure.

38. (Currently Amended) A method for recording or reproducing data on or from a high-density recording medium, ~~comprising the steps of:~~ medium including one or more recording layers, the method comprising:

reading information included in a burst cutting area of the recording medium, the burst cutting area being located at an inner area other than a lead-in area, ~~and the burst cutting area~~ including a plurality of data units, the information included in at least one of the data unit-units and including at least a medium type information that identifies what kinds of recording layers are included in the recording medium; and

controlling a data recording or reproducing operation, based on the read information.

39. (Previously Presented) The method according to claim 38, wherein each data unit comprises a plurality of information bytes, the information included in at least one information byte of the data unit.

40. (Previously Presented) The method according to claim 38, wherein the information further includes layer information to indicate the number of layers included in the recording medium, thereby identifying the number of layers of the recording medium.

41. (Previously Presented) The method according to claim 40, further comprising:
processing the read information included in at least one data unit to identify the information.

42. (Previously Presented) The method according to claim 41, wherein the information is repeatedly included in each data unit, wherein the processing step processes the read information included in each data unit to identify the information.

43. (Previously Presented) The method according to claim 38, wherein the medium type information represents the type of a BD-ROM (BD-Read Only memory), a BD-R (BD-Recordable), or a BD-RE (BD-Rewritable).

44. (Previously Presented) The method according to claim 38, wherein the information includes a reflectivity information of the recording medium, thereby controlling an optical power or an automatic gain for a recording or reproducing operation.

45. (Previously Presented) The method according to claim 38, wherein the information includes a sequence number to identify a data unit, thereby identifying the data unit that includes the information.

46. (Previously Presented) The method according to claim 38, wherein the reading step reads the information preferentially when the recording medium is loaded in a recording or reproducing apparatus.

47. (Previously Presented) The method according to claim 38, wherein the reading step reads the information in early stage for recording or reproducing data on or from the recording medium.

48. (Previously Presented) The method according to claim 38, wherein the reading step reads the information at early stage of drive start-up procedure.

49. (Previously Presented) The method according to claim 38, wherein the lead-in area includes information equal to the information of the burst cutting area, the method further comprising, moving an optical pickup to first read the information recorded on the burst cutting area.

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